

AMENDMENTS TO CLAIMS

1. (Currently Amended) A light-emitting device comprising a reflective element, an emissive layer, a phase plate, and a polarizer in this order, wherein polarization separators are provided between said emissive layer and said phase plate, ~~in light of a wavelength range which includes a narrower wavelength range than a light emission wavelength of the light emissive layer, so as to increase color purity and is directed from said emissive layer side to said polarization separators side, said polarization separators reflect circularly polarized light components which are converted into linearly polarized light that is absorbed by said polarizer due to an operation of said phase plate and transmit the other light, and said reflective element is a reflecting surface for reflecting at least the circularly polarized light which was perpendicularly incoming as a circularly polarized light whose rotating direction is opposite~~

said polarization separators reflect specific light components from both ambient and electrically stimulated light traveling from said emissive layer side and pass the remaining light,

wherein said remaining ambient light is absorbed by said polarizer and a component of said remaining stimulated light is transmitted by said polarizer after conversion into a linear polarization by said phase plate,

wherein said specific light is in a wavelength range that is narrower than the light-emission wavelength range of said emissive layer,

said specific light includes a polarized light component which is absorbed by said polarizer after conversion into a linear polarization by said phase plate.

2. (Original) A device according to claim 1, wherein said polarization separators are cholesteric liquid crystal layers and said phase plate is a quarter-wave plate.

3. (Currently Amended) A light-emitting display device comprising a reflective element, an emissive layer, a phase plate, and a polarizer in this order, wherein

polarization separators are provided between said emissive layer and said phase plate and said polarizer, in light of a wavelength range which includes a narrower wavelength range than a light emission wavelength of the light-emissive layer, so as to increase color purity and is directed from said emissive layer side to said polarization separators side,

said polarization separators reflect linearly polarized specific light components which are absorbed by said polarizer and transmit the other light from both ambient and electrically stimulated light traveling from said emissive layer side and pass the remaining light, said phase plate is a quarter-wave plate, and said reflective element is a reflecting surface for reflecting at least the circularly polarized light which was perpendicularly incoming as a circularly polarized light whose rotating direction is opposite

wherein said remaining ambient light is absorbed by said polarizer and a component of said remaining stimulated light is transmitted by said polarizer after conversion into a linear polarization by said phase plate,

wherein said specific light is in a wavelength range that is narrower than the light-emission wavelength range of said emissive layer,

said specific light includes a polarized light component which is absorbed by said polarizer after conversion into linear polarization by said phase plate.

4. (Original) A device according to claim 1, wherein said emissive layer is organic thin films sandwiched by an optically transparent electrode and a metal electrode, and said metal electrode is a reflective electrode also serving as said reflective element.

5. (Currently Amended) A light-emitting display according to claim 3, comprising: a plurality of light-emitting devices arranged in a matrix-form; and control means for controlling light-emitting operations of said light-emitting devices on the basis of image information, ~~wherein the light-emitting devices according to claim 1 or 3 are used as said light-emitting devices.~~

6. (Currently Amended) ~~A light-emitting display having a light-emitting device constructing a plurality of pixels arranged in a matrix form and control means for controlling a light-emitting operation of said light-emitting device on the basis of image information, wherein said light-emitting device comprises in order: organic electroluminescence devices of a structure obtained by depositing a metal electrode also serving as a reflective element, an emissive layer made of an organic thin film, and an optically transparent electrode; a phase plate; and a polarizer, A display comprising a reflective element, an emissive layer, a phase plate, and a polarizer in this order, wherein~~

polarization separators are provided between said emissive layer and said phase plate, ~~in light of a wavelength range which includes a narrower wavelength range than a light emission wavelength of the light-emissive layer, so as to increase color purity and is directed from said emissive layer side to said polarization separators side, said polarization separators reflect circularly polarized light components which are converted into linearly polarized light that is absorbed by said polarizer due to an~~

~~operation of said phase plate and transmit the other light, and said reflective element is a reflecting surface for reflecting at least the circularly polarized light which was perpendicularly incoming as a circularly polarized light whose rotating direction is opposite~~

said emissive layer includes an emissive layer of red light emission, an emissive layer of green light emission and an emissive layer of blue light emission,

said polarization separators reflect specific light components from both ambient and electrically stimulated light traveling from said emissive layer side and pass the remaining light.

wherein said remaining ambient light is absorbed by said polarizer and a component of said remaining stimulated light is a transmitted by said polarizer after conversion into a linear polarization by said phase plate,

wherein said specific light is in a wavelength range that is narrower than the light-emission wavelength range of one of said emissive layer of red light emission, said emissive layer of green light emission, or said emissive layer of blue light emission,

said specific light includes a polarized light component which is absorbed by said polarizer after conversion into a linear polarization by said phase plate.

7. (Original) A display according to claim 6, wherein said polarization separators are cholesteric liquid crystal layers and said phase plate is a quarter-wave plate.

8. (Currently Amended) A display according to claim 6, wherein a light-emission color layer of said emissive layer differs in dependence depending on the pixel, and a reflective wavelength of said polarization separators ~~differs in dependence~~ is dependent on the pixel in correspondence to said light-emission color layer.

9. (Currently Amended) A display according to claim 6, wherein said emissive layer constructing ~~said~~ a plurality of pixels executes a color display constructed by one of ~~an~~ said emissive layer of a red light emission, ~~an~~ said emissive layer of a green light emission, ~~and an~~ or said emissive layer of a blue light emission, a polarization separator for reflecting red light is pattern-formed at a position corresponding to said emissive layer of the red light emission, a polarization separator for reflecting green light is pattern-formed at a position corresponding to said emissive layer of the green light emission, and a polarization separator for reflecting blue light is pattern-formed at a position corresponding to said emissive layer of the blue light emission, respectively.

10. (Original) A display according to claim 6, wherein said polarization separators are pattern-formed in a matrix-form in correspondence to light-emitting regions of said emissive layer constructing said pixels, and a black matrix is formed between the patterns of said polarization separators.

11. (Original) A display according to claim 10, wherein an aperture of said black matrix is wider than the light-emitting regions of said emissive layer constructing said pixels.

12-13. (Canceled)

14. (Original) A device or a display according to claim 1 or 6, wherein a center wavelength of the light emission of said emissive layer or a wavelength (peak wavelength) at which a maximum intensity is obtained almost coincides with a center

wavelength of the reflection of said polarization separators at the position corresponding to said emissive layer.

15. (Original) A device or a display according to claim 1 or 6, wherein the reflective wavelength of said polarization separators at the position corresponding to a light-emitting region of said emissive layer is narrower than a light-emitting wavelength range of said emissive layer.

16. (Currently Amended) A device ~~or a display~~ according to claim 1 ~~or 6~~, wherein a center wavelength of the reflection of a polarization separator which is formed at a position corresponding to an emissive layer of a red light emission and reflects red light is set to be longer than a center wavelength of the light emission of said emissive layer or a wavelength (peak wavelength) indicative of a maximum intensity, thereby allowing the light-emission wavelength range of said emissive layer and a reflective wavelength of said polarization separator to almost coincide with each other in a visible wavelength range or setting the reflective wavelength of said polarization separator to be narrower than the light-emission wavelength range of said emissive layer in a visible wavelength range.

17. (Original) A device or a display according to claim 1 or 6, wherein an organic electroluminescence device is formed on a first substrate, the polarization separators are formed on a transparent second substrate different from said first substrate, a forming surface of the first substrate where said organic electroluminescence device has been formed and a forming surface of said second substrate where said polarization separators have been formed are overlaid and fixed.

18. (Original) A device or a display according to claim 1 or 6, wherein no substrate exists between said emissive layer and said polarization separators.

19. (Previously Presented) A device or a display according to claim 1 or 6, wherein a transparent insulation layer is provided between an optically transparent electrode and said polarization separators.

20. (Original) A device or a display according to claim 1 or 6, wherein a partition obtained by dispersing a pigment having a light absorbing property is provided into a non-light-emitting portion of said emissive layer.

21. (Original) A display according to claim 6, wherein said emissive layer constructing said pixels is an emissive layer for emitting white light, a polarization separator for reflecting red light, a polarization separator for reflecting green light, and a polarization separator for reflecting blue light are pattern-formed at positions corresponding to light-emitting regions of the emissive layer constructing said pixels, further, a color filter for transmitting red light is pattern-formed at positions corresponding to said polarization separator for reflecting the red light, a color filter for transmitting green light is pattern-formed at positions corresponding to said polarization separator for reflecting the green light, and a color filter for transmitting blue light is pattern-formed at positions corresponding to said polarization separator for reflecting the blue light, respectively.

22. (New) A display device according to claim 6, wherein
a polarization separator for reflecting light of narrower wavelength range than the wavelength range of said emissive layer of red light emission is disposed between said emissive layer of red light emission and said phase plate,
a polarization separator for reflecting light of narrower wavelength range than the wavelength range of said emissive layer of green light emission is disposed between said emissive layer of green light emission and said phase plate,
a polarization separator for reflecting light of narrower wavelength range than the wavelength range of said emissive layer of blue light emission is disposed between said emissive layer of blue light emission and said phase plate.

23. (New) A display device according to claim 6, wherein
polarization separators for reflecting red light emission at a corresponding position to said emissive layer of red light emission,
polarization separators for reflecting green light emission at a corresponding position to said emissive layer of green light emission, and
polarization separators for reflecting blue light emission at a corresponding position to said emissive layer of blue light emission, are pattern formatted, individually.

24. (New) A display device comprising a reflective element, an emissive layer, a phase plate, and a polarizer in this order, wherein
polarization separators are provided between said emissive layer and said phase plate,
color filters are disposed between said polarization separators for separately transmitting red light, green light and blue light,

said polarization separators reflect specific light components from light traveling from said emissive layer side to said polarization separators side and pass the remaining light,

wherein said specific light is light of which the wavelength range is narrower than the light-emission wavelength range of said emissive layer,

said specific light includes a polarized light component which is absorbed by said polarizer after conversion into a linear polarization by said phase plate.

25. (New) A display device according to claim 3, wherein

said polarization separator for reflecting red light is disposed between said emissive layer and said color filter for passing said red light emission,

said polarization separator for reflecting green light is disposed between said light emissive layer and color filter for passing said green light, and

said polarization separator for reflecting blue light is disposed between said light emissive layer and color filter for passing said blue light emission.